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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/510,962	11/01/2004	Oliver Seeger	260421US0PCT	8011
22850	7590	09/12/2006	EXAMINER	
C. IRVIN MCCLELLAND OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			HAILEY, PATRICIA L	
			ART UNIT	PAPER NUMBER
			1755	

DATE MAILED: 09/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/510,962

Applicant(s)

SEEGER ET AL.

Examiner

Patricia L. Hailey

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 November 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 4-10 is/are rejected.
- 7) ☒ Claim(s) 3 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>11/01/04</u> . | 6) <input type="checkbox"/> Other: _____ |

Applicants' Preliminary Amendment, filed on November 1, 2004, has been made of record and entered. The claims have been amended to eliminate multiple claim dependency and to employ proper U. S. Patent format; no new matter has been added.

Claims 1-10 are pending in this application.

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Applicants' Priority Document was filed on November 1, 2004.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

3. ***Claims 1, 2, and 4-10 are rejected under 35 U.S.C. 102(e) as being unpatentable over Hennemann et al. (U. S. Patent No. 6,409,815).***

Hennemann et al. disclose surface-modified pigments obtained by partial coating of a conductive pigment with an organic modifying agent. The pigment is prepared by dispersing said pigment, adding the modifying agent thereto (if appropriate, as a mixture

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with a solvent), removing the solvent (if present), with agitation and heating the pigment to 100°C, and drying the partially coated pigment. See the Abstract of Hennemann et al.

Examples of the modifying agent include those of the formula:



wherein

X has the above-mentioned meaning,

n is 1-30,

m is 1-10, and

p is 3 when X is Si, Sn, Ti or Zr, and 2 when X is Al.

See col. 3, lines 5-17 of Hennemann et al. (lines 5 and 6 define the variable X as "Si, Sn, Ti, Zr, or Al"), which also disclosed n-hexyldecyl-tri-ethoxysilane and methyl-tri-ethoxysilane as exemplary modifying agents; this disclosure is considered to read upon the silane recited in **claims 4-6**.

With respect to **claims 2, 7, and 8**, Hennemann et al. also disclose that, if silanes are used as modifying agents, it may be necessary to subject them to preliminary hydrolysis, as the silane does not react directly with the hydroxyl groups on the surface of the pigment. Thus, water and a solvent are added to the silane, and the mixture is subjected to preliminary hydrolysis by stirring at room temperature for 30 minutes. After the coating operation, heat treatment at temperatures ranging from about 50°C to 200°C is necessary after removal of the solvent. Exemplary solvents include organic solvents, e.g., ketones, ethers, and alcohols. See col. 3, lines 32-43 of Hennemann et al.

Patentees' pigment can be incorporated into systems such as lacquers, casting resins, coatings, printing inks, powder coatings, and the like. See col. 4, lines 15-23 of Hennemann et al.; this disclosure is considered to read upon **claims 9 and 10**.

Hennemann et al. do not explicitly describe the modified pigment as a "goniochromatic luster pigment, nor does the reference explicitly disclose the phrase "dielectric low-refractive interference-colored layer". However, this reference at col. 4, lines 32-36 refer to "pearl luster pigments", which is considered equivalent to the term "goniochromatic pigment". Further, the reference's teaching of modifying the pigment with a silane subjected to preliminary hydrolysis with a solvent is considered to read upon Applicants' claim limitation "...layer which includes a polar organic solvent which can interact with the layer material via hydroxyl or amide groups", as said hydrolysis enables the silanes to react with the hydroxyl groups on the surface of the pigment (col. 3, lines 35-37 of Hennemann et al.).

In view of these teachings, Hennemann et al. anticipate claims 1, 2, and 4-10.

Allowable Subject Matter

4. Claim 3 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5. The following is a statement of reasons for the indication of allowable subject matter:

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The prior art does not teach or reasonably suggest ethylene glycol as an organic solvent for the aforementioned preliminary hydrolysis of the silane.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

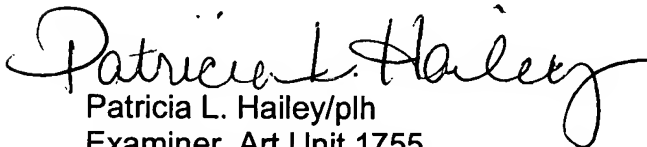
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patricia L. Hailey whose telephone number is (571) 272-1369. The examiner can normally be reached on Mondays-Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo, can be reached on (571) 272-1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group 1700 Receptionist, whose telephone number is (571) 272-1700.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Patricia L. Hailey/plh
Examiner, Art Unit 1755
September 11, 2006



J. A. LORENGO
SUPERVISORY PATENT EXAMINER